DOCUMENT RESUME

ED 205 106 HE 014 132

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TITLE An Evaluation of Integrated Productivity and Budgetary Systems in New York State University Colleges. AIR Forum 1981 Paper.
PUB DATE May 81
NOTE 16p.: Paper presented at the Annual Forum of the Association for Institutional Research (21st, Minneapolis, MN, May 17-20, 1981).

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Accountability: *Budgeting: Comparative Analysis: Cost Estimates: Departments: Expenditures: Faculty Workload: Higher Education: *Information Systems: Productivity: *Program Costs: Resource Allocation: State Standards: *State Universities: Statistical Data
IDENTIFIERS *AIR Forum: *State University of New York

ABSTRACT

The State University of New York's (SUNY) Budget System and the Course and Section Analysis (CASA) System, which were developed to ensure accountability at the campus level, are described. Problem areas and resulting inaccurate and potentially misleading information are examined for the 12 state university colleges. The Budget System and CASA System have been linked together to generate comparable information on instructional productivity and the associated costs. Allocations are made to each SUNY campus by major areas of activity, including instruction and departmental research (I & DR) and general institutional service (GIS). I & DR contains all of the academic departments within each institution, and generates all student and faculty workload activity. GIS provides services that have widespread campus usage and that must be recharged. The CASA system is designed to collect, process, and report information on faculty, student and department instructional workload, costs of instruction, and utilization of instructional facilities. At the end of the CASA cycle, information on support costs is generated. The Budget System and CASA System are two different functional entities: however, they have been integrated to estimate direct and indirect costs of instruction. Problems exist with the campus comparisons of indirect costs because of the inconsistencies in assigning costs to dean's units and academic units at the campus level and also differences in how recharge categories are established and assigned to budget units (e.g., computer services are used by academic departments at all institutions but are not always recharged at all of them). Suggestions are offered to help resolve the inconsistencies. (SW)

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AN EVALUATION OF INTEGRATED PRODUCTIVITY AND BUDGETARY SYSTEMS IN NEW YORK STATE UNIVERSITY COLLEGES

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THE ASSOCIATION FOR INSTITUTIONAL RESEARCH

This paper was presented at the Twenty-First Annual Forum of the Association for Institutional Research held at the Leamington Hotel in Minneapolis, Minnesota, May 17-20, 1981. This paper was reviewed by the AIR Forum Publications Committee and was judged to be of high quality and of interest to others concerned with the research of higher education. It has therefore been selected to be included in the ERIC Collection of Forum Papers.

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Productivity and budgetary systems have been linked by the State University of New York. A great deal of useful and comparable cost data results, but systematic problems lead to inconsistencies. The unintended effect is inaccurate and potentially misleading information. Definitions for each of these systems are appropriate; however, when the systems are linked together, some difficulties arise. Detailed analysis of these systems reveals the sources of these inaccuracies, and examples are provided. The value of this integrated system has been decreased because of uncertainty about data comparability.

I. Introduction

The State University of New York (SUNY) developed systems to ensure accountability at the individual campus level. Two of these systems, the Budget system and the Course and Section Analysis (CASA) system, have been linked together to generate comparable information on instructional productivity and the associated costs. The resulting report, Statistical Abstracts, is given wide distribution within SUNY and to many State agencies and departments.

This paper briefly describes the Budget and CASA systems, and problem areas that lead to inconsistencies. The resulting inaccurate and potentially misleading information will be examined for the 12 State University Colleges.

II. Budget System

The New York State Executive Budget recommends allocations to each SUNY campus by major areas of activity. Two areas of particular concern in this study are Instruction and Departmental Research (I & DR) and General Institutional Service (GIS). Instruction and Departmental Research contains all of the academic departments within each institution, and generates all student and faculty workload activity. General Institutional Services provide services that have widespread campus usage and which must be recharged.

Within each of the academic units of Instruction and Departmental Research, the campus determines the allocations for the various budget categories. These include salaries, temporary service, supplies and expense, equipment and recharge services.

The rechargeable services from General Institutional Services are Computer Services, Central Stores, Telephone and Telegraph, Mail and Messenger, Central Duplicating and Printing, and State Auto. The budget mechanism for recharges (SUNY, 1980b) is that the total amount to be budgeted for each of the rechargeable services must be allocated in the GIS service accounts. The user departments' estimated need for each service is recorded as part of their departmental budget under the appropriate recharge category and a corresponding amount is decreased from the GIS recharge account. Each campus develops rates per unit of usage and the costs are assessed against each department. When exact usage cannot be determined for a department, a method of cost estimation should be used for recharging.

III. Course and Section Analysis System

This system is designed to collect, process and report information on faculty, student and department instructional workload; costs of instruction, and utilization of instructional facilities (Kopf, 1980). At the end of the CASA cycle, information on support costs is generated. Direct costs of instruction are based upon the salaries of all persons who teach. Indirect costs include salaries of non-teaching individuals, temporary service, supplies and expense, equipment, and recharge categories.

For each budget function unit within I & Dr, support costs are calculated where Weekly Faculty Contact Hours (faculty time spent in classroom activities) and Student Credit Hours (the number of students times the credit value of the course) are both present.

Support costs are not calculated for a unit when Weekly Faculty Contact Hours are not present, even if Student Credit Hours have been generated.

IV. System Inconsistencies

Within the Budget allocation process, inconsistencies exist between campuses in terms of how funds are allocated at the departmental level. For example, one campus assigns all except instructional salaries to a Dean's unit, while another campus assigns specific funds for all of the indirect costs of instruction to each of the academic departments under a Dean's supervision. If there is no instructional activity occuring in the Dean's unit in the former case, according to the Weekly Faculty Contact Hour definition, then these indirect costs are not considered instructional costs in Statistical Abstracts. However, the indirect costs in the latter case are applied to each of the academic departments and show as costs in Statistical Abstracts.

Another type of inconsistency arises between campuses in terms of recharge categories. While most of these categories deal in tangible services, such as telephone or mail, computer services are used by academic departments at all institutions but are not always recharged at all of them. This results in widely divergent indirect costs of instruction for natural and mathematical science departments among campuses in Statistical Abstracts.

V. Campus Comparisons

All of the State University Colleges are examined for the Fall 1979 semester in terms of indirect costs of instruction. The nature of the budget process, fiscal year determinations, and

publication schedules requires the use of the allocations by budget unit rather than the finalized expenditures. However, these allocations are official indications of an intent to spend money and are circulated widely (SUNY, 1980a). The Brockport experience suggests that the allocations are very close estimates of final expenditures. Differences between allocations and expenditures for indirect cost categories are generally between two percent and three percent of the I & DR totals.

Table 1 indicates the magnitude of the indirect cost problem in terms of allocation to Dean's units rather than to academic units. Within each indirect cost budget category, the percentages of the allocations for each type of unit is illustrated. Although in some cases, Dean's units do provide instruction, the predominant situation is that no instruction occurs. Therefore, all indirect costs for these areas are grouped together and are distinct from the academic units that do provide instruction.

Within each of the indirect cost categories, the variation is quite substantial between campuses. A 69.0% spread exists between the high and low percentages allocated to Dean's areas for Temporary Service; there is a 31.2% difference for Supplies and Expense; a 97.7% difference for Equipment; a 93.2% difference for Storehouse Recharge; a 56.5% difference for Telephone Recharge; a 34.1% difference for Mail Recharge; a 79.5% difference for Duplication Recharge; a 77.4% difference for Auto Recharge; and a 100.0% difference for Computer Recharge.

There is also a large difference within most of the campuses in terms of the percentages that are allocated to Dean's units for

various indirect cost categories. At campus A, the difference between the high and low percentages allocated across cost categories for Dean's units is 83.3; for campus B it is 59.5%; for campus C it is 88.7%; for campus D it is 88.1%; for campus E it is 11.9%; for campus F it is 86.9%; for campus G it is 73.0%; for campus H it is 24.5%; for campus I it is 37.7%; for campus J it is 91.2%; for campus K it is 93.4%; and for campus L it is 9.4%.

In Table 2, the campuses are compared in terms of the total dollars allocated for indirect cost categories to Dean's units and the impacts on costs per Student Credit Hours (SCH) generated. Campuses E and G have not allocated Computer Recharge costs to either Dean's units or academic units and this must be seen as a basic flaw in the Recharge mechanism. This table separates Dean's units into those that generate Support Costs on CASA because of instructional activities and those that do not generate Support Costs. Total allocations and potential additions to costs per Student Credit Hour show discrepancies between campuses. The range is an increase of $0.34 at campus L to an increase of $7.74 at campus A for a difference of $7.40 per student credit hour.

VI. Summary and Conclusions

The Budget System and CASA System are two different functional entities, however, they have been integrated to estimate direct and indirect costs of instruction. Problems exist with the campus comparisions of indirect costs because of the inconsistencies in assigning costs to Dean's units and academic units at the campus level and also differences in how Recharge Categories are established

and assigned to budget units. The magnitude of these campus differences have been demonstrated by percentage of allocations in Table 1 and dollar allocations in Table 2.

Several conclusions can be drawn from this analysis if indirect costs are to be maintained as part of the instructional cost formula.

1. Policies on recharges should be revised to ensure that all campuses do recharge costs within I & DR units in all of the recharge categories.
2. Mechanisms should be established to monitor the successful implementation of these reviesed policies.
3. Procedures need to be established to deal with campus variability in cost allocations to Dean's units. One potential solution is to assign indirect costs from Dean's units to the subordinate academic units based on F.T.E. faculty or Student Credit Hour production.

TABLE 1: PERCENTAGES OF INDIRECT COSTS IN DEAN'S UNITS AND ACADEMIC UNITS

	Temporary Service		Supplies & Expense		Equipment	
Campus	Dean's Units	Academic Units	Dean's Units	Academic Units	Dean's Units	Academic Units
A	23.5	76.5	27.1	72.9	16.7	83.3
B	18.4	81.6	35.5	64.5	44.5	55.5
C	40.2	59.8	32.1	67.9	83.2	16.8
D	24.9	75.1	21.8	78.2	97.7	2.3
E	5.7	94.3	6.3	93.7	15.1	84.9
F	12.1	87.9	19.7	80.3	13.5	86.5
G	73.0	27.0	4.3	95.7	0.0	100.0
H	6.5	93.5	8.5	91.5	10.1	89.9
I	4.7	95.3	20.2	79.8	0.0	100.0
J	35.0	65.0	16.5	83.5	8.8	91.2
K	50.1	49.9	28.6	71.4	97.0	3.0
L	4.0	96.0	8.8	91.2	6.6	93.4

TABLE 1: PERCENTAGES OF INDIRECT COSTS IN DEAN'S UNITS AND ACADEMIC UNITS CONTINUED

Campus	Storehouse Recharge		Telephone Recharge		Mail Recharge	
	Dean's Units	Academic Units	Dean's Units	Academic Units	Dean's Units	Academic Units
A	35.3	64.7	47.4	52.6	33.3	66.7
B	12.6	87.4	59.7	40.3	20.9	79.1
C	24.5	75.5	14.3	85.7	18.8	81.2
D	14.3	85.7	11.9	88.1	38.1	61.9
E	3.7	96.3	3.2	96.8	10.9	89.1
F	96.4	3.6	9.5	90.5	28.8	71.2
G	4.6	95.4	5.0	95.0	4.0	96.0
H	3.2	96.8	8.7	91.3	25.0	75.0
I	13.7	86.3	16.8	83.2	19.1	80.9
J	23.2	76.8	12.8	87.2	21.8	78.2
K	6.6	93.4	7.2	92.8	19.0	81.0
L	6.0	94.0	5.6	94.4	8.8	91.2

TABLE 1: PERCENTAGES OF INDIRECT COSTS IN DEAN'S UNITS AND ACADEMIC UNITS CONTINUE

	Duplication Recharge		Auto Recharge		Computer Recharge	
Campus	Dean's Units	Academic Units	Dean's Units	Academic Units	Dean's Units	Academic Units
A	43.2	56.8	46.3	53.7	100.0	0.0
B	36.0	64.0	16.4	83.6	0.2	99.8
C	26.7	73.3	11.3	88.7	100.0	0.0
D	66.4	33.6	31.8	68.2	100.0	0.0
E	11.5	88.5	4.6	95.4	----	----
F	84.2	15.8	77.4	22.6	16.5	83.5
G	4.7	95.3	0.0	100.0	----	----
H	6.6	93.4	4.2	95.8	27.7	72.3
I	37.7	62.3	11.8	88.2	1.9	98.1
J	20.6	79.4	2.4	97.6	100.0	0.0
K	10.6	89.4	16.3	83.7	100.0	0.0
L	9.0	91.0	9.4	90.6	0.0	100.0

TABLE 2: TOTAL ALLOCATIONS TO DEAN'S UNITS FOR INDIRECT COST CATEGORIES

Campus	Support Allocations	Non-Support Allocations	Total Allocations	Total Allocations per SCH
A	$ 67,615	$226,504	$294,119	$7.74
B	0	136,472	136,472	2.10
C	209,387	137,458	346,845	3.99
D	5,514	487,529	493,043	4.61
E	0 *	50,146 *	50,146 *	0.56
F	32,626	155,161	187,787	2.29
G	7,990 *	168,532 *	176,522 *	5.19
H	9,425	75,600	85,205	1.09
I	25,800	49,100	74,900	1.04
J	0	191,533	191,533	2.25
K	0	259,467	259,467	1.95
L	5,973	33,313	39,286	0.34

* No Computer Recharge Indicated At This Campus

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